# ORIGINAL ARTICLES

### THE EDUCATION OF A DERMATOLOGIST\*

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THE requirements in education fitting an individual to practice medicine today are necessarily centered about the studies that develop facts in chemistry, physics, anatomy, physiology, biology, pharmacology, etc. Anticipating the special medical preparation, the quality of the training which the student receives in high school, and in the academic college, largely determines his final success in medicine. This foundation work orients the student as a social unit with reference to the past, the present, and the future. In brief, it breaks away the protective shell of his youth, allowing him to go forth to explore the world.

We are all creatures of habit actions. These rule-o'-thumb, or automatic actions, will satisfy in most of our problems; but to direct the successful outcome in many other situations, real thinking is necessary to form a judgment for particularized action.

#### PRIMARY TRAINING

Educators in our high schools and colleges are at more or less variance as to the selection of material that best suits the purpose of mind development, by increasing a student's knowledge of reading, writing, and arithmetic. This primary training of his mind consists of observation, recording the observations, the realization of a problem and taking the logical steps for the solution of the problem. The youth has environmental forces that elders help him to overcome; but in this helping process it is vital to draw him out so that he may shoulder his responsibilities, thereby building up his courage to overcome difficulties and increasing his confidence in his own abilities.

# ACADEMIC TRAINING

To enlarge the scope of his mind and educate him, the academic colleges offer to the student a varied list of courses. The classics form the foundation for these courses. These works of outstanding individuals are the priceless recorded ideas and actions of man's past. The college presidents recommend for study history, languages, literature, philosophy, psychology, mathematics, science, religion, and government, to which are necessarily added physical training and sport. Four years of attention to such mental and physical discipline will give a broad view of life and provide a fund of facts for the student to mull over and form ideas of his own. He should now be able to think clearly and make decisions of value to himself and others. During vacation intervals, valuable manual training can be secured in work that will add to his experience both pleasure and profit.

#### MEDICAL EDUCATION

If the student has now made his decision to become a physician, he is confronted with the choice of a medical institution. This question is answered, for the majority of students, by economic necessities. However, at the present time, excellent facilities are available throughout the United States in all population centers. Fine buildings and elaborate equipment do not of themselves offer advantages: good teachers are essential. Small classes give more personal contact, arousing interest and enthusiasm for the work at hand. During the first two years of the medical course, the factual material is voluminous, with some relief to its monotony by laboratory work. Friendly groups of fellow students may organize quiz meets for work in anatomy, physiology, bacteriology, etc., thereby profiting by offhand talks among themselves. Constant repetition is desirable.

Early in his career as a medical student the use of a microscope will offer an incentive to form a collection of specimens that are made for study purposes. Carefully prepared, such specimens will form the nucleus of a valuable personal museum for his use in repeated study and comparison. Gross specimens in anatomy should be secured and added to this museum. The art of photography is always an aid. The practice of making drawings of physiological experiments, with full written notes, can be made the threshold for the writing of clinical histories.

In the courses for study, during the third and fourth years, a choice will be allowed. It would be well to select those that add to the broad science base upon which the art of medicine is erected rather than too early study of specialized work. Physical examination of patients early and often should be encouraged so that the memory picture of the normal body organs will become fixed. Laboratory work in all the standard routines must be mastered, leaving theoretical data gathering to some future opportune time.

A nucleus of his medical library can be started during his student days that brings into play the joyful habit of adding regularly, volume after volume, to the end of his days. The crowding of his study time should not exclude a portion for medical history. Learning the lives and work of the men who have overcome great difficulties to advance our knowledge of scientific foundations for the use of medicine is truly inspirational.

#### INTERNSHIP

The year of internship should by preference be taken in a general hospital where the different services are conducted by a staff of specialists. Appointment to a hospital other than that of his Alma Mater offers opportunity to receive instruction under the guidance of a new set of teachers who probably will inspire enthusiasm from angles other than formerly.

In this hospital year, the student comes more in contact with the applied knowledge of medical training. His efforts should be directed to three main objectives: first, making himself competent to examine a patient, to enable him to arrive at a

<sup>\*</sup> Chairman's address, Dermatology and Syphilology Section of the California Medical Association, at the sixty-sixth annual session, Del Monte, May 2-6, 1937.

diagnosis in order that satisfactory treatment may be ordered; second, a review of the theoretical medical teachings of his collegiate courses, preparatory for the examination by a State Board granting him legal status to practice his profession; third, the tentative choosing of his future specialty in medical work. This decision to limit his study to a certain specialized branch of medicine should not be followed up too exclusively as yet, but rather in the sense of a gradual leaning toward, or forethought for, his chosen line.

#### COMMENT

Let us now briefly survey the results in the metamorphosis of our dermatologist. He has first been a student of general learning to fit himself into the scheme of society as one of its units. He has thought out his plan of life, making a decision to study medicine, and has devoted four years in the theoretical studies of those sciences that form the basis for proficiency of action in the practice of medicine. He has served his year of practice under guidance as an intern in a general hospital of his choice. He has passed the legal tests establishing his competence in his profession. He has also made the fateful decision to further study in order to practice in his mature years the art of dermatology. What now to do? Is it best to continue as a student seeking his postgraduate dermatological training in the succeeding two or three years, or shall it be a putting off of his student robes for the actual service in medicine? The answer should come from the necessities of the work in treating skin diseases. Those of experience know how essential it is for the dermatologist to have a comprehensive understanding of the body as a unit in forming his judgments in etiology, diagnosis, prognosis, and treatment. John Hunter, in the past, said to Jenner, "Don't think—try!" Jenner wisely took his advice and practiced the art of inoculation in the early work of prophylaxis. Our student surely will profit if he does likewise, going into general medical practice for a period, let us say, of four years. These years of application of his theoretical knowledge will give him finesse in the psychology of his work, will ripen his judgment, give him more independence and, most valuable of all, heighten his powers to think clearly.

# VALUE OF EXPERIENCE IN GENERAL PRACTICE

In a conversation with Professor Erich Hoffmann of Bonn, Germany, during his recent visit to San Francisco, he strongly advised the experience of general practice before taking up postgraduate work in dermatology. He mentioned his own experience of several years' work in the army, where he did general medical work, later taking up dermatology.

Having passed all of his tests and been received into the medical profession as a legal practitioner of the art, our fledgling doctor will be wise to avoid the many beckoning pitfalls. He is now a professional man, with service his watchword, to build an honorable reputation. His education has fitted him to form a judgment for action based upon a knowledge of the facts at hand, carefully thought

out, against the alternatives. He should have the courage of his convictions, and guard his actions for the highest service to be rendered to his patients. The Hippocratic oath can be lived up to and add to the stature of his reputation.

Four years of his life now devoted to the general practice of medicine provides a wide field for experiences. The application of his knowledge develops his mental capacity. The first-hand contact with his patients as "cases" fires his desire for study, and leads him on to more and more gathering of knowledge. With careful observation of his cases, he will find his diagnostic ability improving. Rational treatment keeps gaining. A study of his mistakes jolts him to a higher plane. He will act wisely if he calls, for counsel, men of experience to help guide his actions in difficult cases. This is true both to gain the knowledge of a more experienced fellow practitioner and to have his comforting support for the grave responsibility the case entails.

The horizon of his medical life keeps extending by making it his duty to accept service in the local clinics and hospitals, where he will see many patients that provide material for study.

Coöperation can be given to the medical societies, with friendly help in any division of their activities. These contacts with others in his profession make him realize that it is not he alone who must work and serve to accomplish the duties of the passing days.

Subscriptions to journals and medical literature are a necessary part of his equipment. Medical libraries provide a wider field to be made use of on occasion, but cannot take the place of the handy journal or book in the office or home.

# DERMATOLOGY IN GENERAL PRACTICE

In the general practice of medicine there will be many opportunities to observe and study examples of common diseases affecting the skin. By carefully noticing the type of lesions of primary nature with their successive changes and variation to their final resolution, one fixes the "clinical picture" in his mind, thus making for proficiency in diagnosis. Opportunities will not be lacking to study scabies, the pyodermias, eczemas, psoriasis, urticarias, contact dermatitis, lues in many manifestations, nevi, epitheliomata, the keratoses, the exanthemata, and probably many more. He will soon discover that very careful observation of the objective symptoms is a primary requisite to even a group diagnosis of skin diseases. As for treatment, it will be a puzzle that can be solved only by referring the patient to a dermatologist. The conscientious general practitioner will soon learn his limitations and, by consultation in his difficult problems or referring the patient to the proper specialist, he adds to his reputation for service.

#### POSTGRADUATE TRAINING

Now that our candidate has thoroughly prepared himself in the firm foundations of medicine he can much more readily appreciate and absorb the postgraduate instruction.

The universities in America now offer courses in postgraduate dermatology of the highest stand-

ards, making it feasible for a student to secure in all branches the training that will establish his competence in his specialty before a trial board.

It is advisable to take this work in the large centers such as Chicago, St. Louis, Boston, New York, Philadelphia, or Baltimore.

#### AN OUTLINE OF A YEAR'S WORK

The outline of a year's work would be made up with this schedule for the first six months:

- 1. Anatomy, physiology, and embryology of the skin.
- 2. Parasitology of the skin, including bacteriology and mycology, and the defensive mechanisms.
  - 3. Biology and chemistry of the skin.
  - 4. Photography of skin diseases.
  - For the last six months, the following:
- 1. Clinical dermatology, with differential diag-
- 2. Therapeutic measure for skin diseases, including the use of physical agents, x-ray, radium,
  - 3. Studies in diet and the chemistry of diets.
  - 4. Pathological studies of the skin.
  - 5. Preparation of moulages.

### **EUROPEAN SCHOOLS**

Having completed these courses, our candidate for high professional attainments envisions material in plenty to practice upon. Now would be the opportune time to take a trip abroad: for the density of the population in the European nations makes possible unlimited material for clinical study.

Time is precious; however, the broadening of understanding one attains by travel and study in different centers highly repays the effort spent at this point in the student's career. Valuable work can be seen and profitable study made of it in London, Paris, Berlin, and Vienna. In a few weeks' time, at each of such places a wonderful amount of clinical material can be examined and classified, and pathological data secured. Welltrained men differ in their approach to a problem. They probably will agree as to a diagnosis, however; in treatment methods they will vary, and the student, seeing work in various clinics, may now form his own opinion to attain the best results.

## IN CONCLUSION

Our dermatologist is now thirty years of age, and is prepared to seek a field of practice where he can be assured of a successful career. In concluding, one may say with assurance, that time and patience, with efficient effort, are required to attain the knowledge for proficiency in treating skin diseases. It is necessary to realize that the work is in a competitive field, with the rewards coming to those individuals who are most competent. The highest professional and ethical standards are fundamental in the contact with patients and brother practitioners. The training of a dermatologist can be spoken of as a necessary public service, the character of the work being such that the other departments of medicine are not fitted to successfully treat these cases. It is a wide field for endeavor, skin diseases being a common illness. 400 Twenty-ninth Street.

# HEALTH DEPARTMENT REMEDIES FOR SICK HOUSING\*

By J. C. Geiger, M.D. San Francisco

Discussion by Walter M. Dickie, M.D., San Francisco; George Parrish, M.D., Los Angeles; Alex M. Lesem, M.D., San Diego.

FOR many years departments of public health have condemned dwellings as unfit for human habitation, and places of business as insanitary and rodent-infested. In a sense, then, the efforts applied by departments of public health to the problems of housing and health have been negative and destructive.

When we have a polluted well and persons drink water from this well, the usual health procedure is to close the well. Likewise, when milk does not come up to certain bacteriologic standards and is derived from sick animals, namely, animals that have not been tested for tuberculosis, the product is usually destroyed. We recognize, however, that the best plan for the community is a chlorinated water supply, sometimes reinforced by filtration, and a pasteurized milk supply, obtained from healthy animals.

If a health department decides in its wisdom to destroy tenements that are unfit for human dwellings, then it is equally logical to demand decent dwellings for replacement.

# THE AMERICAN HOUSING PROBLEM

To the average health officers of American cities the problem quite often presents difficulties; and it is no novelty that some of these difficulties may result in political backfires.

Many of these dwellings are the forgotten houses, derelicts from the past, forsaken by their owners and left as decaying, run-down structures, where people of low incomes must live. They are the first cousins to the slum tenements: blights on the city-socially, economically, and from the standpoint of public health.

America has always had a consciousness toward slums, and there is seen today a dawning perception of our inherent right to decent conditions of living. Bad housing conditions must have cost this nation so much that posterity cannot begin to liquidate the debt. The vast army of the unemployed may always remain industrially inefficient because of disadvantageous living conditions. Forbidding atmospheres of the home, the school, and the shop may exert themselves in many problems, even to become a cause of inebriety. A safe water and milk supply, and proper sewage disposal, are among the best assets a city can have.

### IS HOUSING A MAJOR PUBLIC HEALTH PROBLEM?

The question naturally presents itself, "Can housing be accepted as a major public health problem?"

<sup>\*</sup> From the office of the Director of Public Health, City and County of San Francisco.